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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/678,855

10/03/2003

Takeshi Matsumura

UNIU79.014AUS

2454

20995

7590

12/28/2004

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EXAMINER

Schillinger, Laura M

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,855

Applicant(s)

MATSUMURA ET AL.

Examiner

Laura M. Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7 and 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/30/04; 10/30/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to pertaining to a die bonding film, classified in class 428, subclass 42.2.
- II. Claims 10-14, drawn to a method of fixing a chipped work, classified in class 438, subclass 254.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the adhesive could be used in a tape automated bonding system rather than a pressing system.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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This application contains claims directed to the following patentably distinct species of the claimed invention:

Group I:

Species 1, claims 1-5, 8, pertaining to a dicing/die bonding film wherein a releasability in an interface between the pressure sensitive adhesive layer and the die bonding adhesive layer is different corresponding to work attaching region;

Species 2, claims 6-7, 9, pertaining to a dicing/die bonding film wherein the die bonding adhesive layer is arranged as a work-attaching region on part of the pressure sensitive adhesive layer;

Group II:

Species 1, claims 10-11, 13 pertaining to a method of fixing a chipped work including a dicing/die bonding film wherein a releasability in an interface between the pressure sensitive adhesive layer and the die bonding adhesive layer is different corresponding to work attaching region;

Species 2, claims 12 and 14, pertaining to a method of fixing a chipped work including a dicing/die bonding film wherein the die bonding adhesive layer is arranged as a work-attaching region on part of the pressure sensitive adhesive layer;

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

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readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Mr. Arai on 12/20/04 a provisional election was made with traverse to prosecute the invention of Group I, Species 1, claims 1-5, 8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-7, 9-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Senoo et al ('016).

In reference to claim 1, Senoo et al teaches a dicing/die bonding film comprising:

A pressure sensitive adhesive layer on a supporting base material and a die bonding adhesive layer on the pressure sensitive adhesive layer (Col.5, lines: 40-67),

Wherein releasability in an interface between the pressure-sensitive adhesive layer and the die bonding adhesive layer is different between an interface (A) corresponding to a work-attaching region in the die-bonding adhesive layer and an interface (B) corresponding to a part or a whole of region, other than the work-attaching region and the releasability of the interface (A) is higher than the releasability of interface (B) (Col.6, lines: 5-30)

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In reference to claim 2, Senoo et al teaches wherein adhesion of the pressure-sensitive adhesive layer to the die-bonding adhesive layer is different between a region corresponding to the work-attaching region in the die-bonding adhesive layer and a region corresponding to a part or the whole of the other region and satisfies the relation:

The adhesion of the region(a) is lower than the adhesion of region (b) (Col.6, lines: 5-10).

In reference to claim 3, Senoo et al teaches wherein adhesion of the work-attaching region in the die-bonding adhesive layer to a work to the region(a) satisfies the relationship:

The adhesion to the work is higher than the adhesion to the region (a) (Col.6, lines" 5-10).

In reference to claim 4, Senoo et al teaches wherein the part of the region other than the work-attaching region in the die bonding adhesive layer is a dicing ring-attaching region (ring frame 1-Col.6, lines: 1-5).

In reference to claim 5, Senoo et al teaches wherein adhesion of the dicing ring-attaching region in the die-bonding adhesive layer to dicing ring and to a region (b') corresponding to the dicing ring-attaching region satisfies the relationship:

The adhesion to the dicing ring is lower than the adhesion to the region (b') (Col.6, lines: 5-15).

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In reference to claim 8, Senoo et al teaches wherein the pressure-sensitive adhesive layer is made of a radiation-curing pressure-sensitive adhesive and the region (a) corresponding to the work-attaching region is irradiated with radiations (Col.6-7, lines: 60-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMS

A handwritten signature in black ink, appearing to read "Laura M. Schillinger", with a long, sweeping horizontal line extending from the end of the signature.

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12/24/04